Application No.: 10/577,428

## REMARKS

# Status of the Application

Claims 1-26 are pending in the application. Claims 1-4, 11, 15-17, and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton (US Patent 7,179,232) in view of Twersky (US Patent 4,445,788). Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton in view of Twersky as applied to claim 4 above, and further in view of Juhn (US Patent 4,641,663). Claims 7 and 12-19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Sutton in view of Twersky as applied to claim 1 and 11 above, and further in view of Shapira (US Patent 6,110,176). Claims 20-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton in view of Twersky as applied to claim 1 above, and further in view of Morawski (US Publication 2004/0010236). Claims 24-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton in view of Twersky as applied to claim 1 above, and further in view of Gauthier (US Patent 4,256,119).

By this Amendment, Applicants hereby amend claims 1, 25 and 26, and cancel claims 2 and 24. Because the subject matter of the amendments has previously been presented to the Examiner and has been the subject of a previous search and consideration. Therefore, Applicants respectfully submit that the Amendments should be entered and considered on the merits.

## Preliminary Matters

Applicants thank the Examiner for accepting the drawings filed on April 27, 2006.

Applicants further thank the Examiner for acknowledging the claim for foreign priority and confirming receipt of the certified copy of the priority document.

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## Claim Rejections - 35 U.S.C. § 103

Claims 1-4, 11, 15-17, and 23 are rejected under 35 U.S.C. § 103(a) as being

unpatentable over Sutton (US Patent 7,179,232) in view of Twersky (US Patent 4,445,788).

In the Advisory Action mailed November 3, 2009, the Examiner argues:

The applicant's arguments/remarks have been fully considered but are found to be non-persuasive. The applicant argues that Twersky's detent for holding a protective sheath in an open or closed position in regards to aperatures teaches away from the Sutton reference. They argue that Sutton requires that the inner cannula and outer cannula must be movable and that the Twersky detent mechanism would inhibit this movement. The examiner disagrees with the applicant's argument because the modification of the Sutton reference to include the Twersky detent mechanism does not prevent movement of the inner and outer cannula, but would rather provide for selective assured movement from open and closed positions of select aperatures. Sutton's device allows for the closing of the aperatures by disalignment of the inner cannula aperature and outer cannula aperature. By modifying Sutton with Twersky's detent mechanism, it does not prevent realignment of Suttons' apertures, but rather provides selective alignment and disalignment of successive provides and sugarment of successive selective valignment and disalignment of the provides aperatures in selectively locked positions.

The applicant further argues that there is no motivation for modifying Sutton by Twersky as they belong in different technical fields of invention. The examiner finds the argument non-persuasive as both inventions relate to a device for insertion into a body, consisting of an inner body and outer body wherein the outer body is movable to align and disalign aperatures of the inner and outer body. Although one is for injecting and extracting in surgery and one if for opening and closing sensor windows, they both provide the special technical features of aligning and disaligning inner and outer windowns/aperatures on inner and outer bodies.

Finally, the applicant argues that Shapira does not teach a mixing chamber in the device because the irrigation fluid is delivered into the bone. The examiner disagrees with the applicant's argument. Shapira claims that the irrigation fluid is passed to the "extraction site". The examiner interprets the extraction site as the location where the device and bone meet. If one were to look at figure 4, the extraction site would be where the device is in contact with the bone. At this site there is a large cavity at the end of the device where the mixed fluid and bone marrow is extracted via passage element 53. Furthermore the device discloses this space has ridges, elements 62, which further mixes the bone marrow and irrigation fluid. Thus by further mixing the irrigation fluid and bone marrow in this space, it may be inherently described as a mixing chamber.

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Therefore, the applicant's argument and remarks have been fully considered by the examiner, but are found non persuasive in view of the arguments presented above.

Applicants hereby incorporate the subject matter of both claims 5 and 24 into claim 1. Specifically, amended claim 1 requires a pair of pivotally mounted clawed fasteners disposed diametrically from one another. The Examiner alleges that Juhn discloses the features of claim 5, and Gauthier discloses the features of claim 24. However, neither reference discloses the features of both claim 5 and claim 24. Further, there would be no motivation to combine the references, as Gauthier discloses that the actual locking points are pins 20 and 22, connected to the knob 21, not disposed on arms 17 and 18, and the apparatus in Juhn would not function as intended by adding another latch 67 to the diametrically opposite side of the apparatus. In fact, as shown in FIG. 11 of Juhn, adding a second latch would create a difficulty in use, since the required change in hand position to facilitate the second latch would cause a loss of accuracy in using the apparatus. Therefore, Applicants submit that amended claim 1 is patentable over the applied art.

Claims 2-4, 11 and 15-17 depend from claim 1 and are patentable at least by virtue of their dependency therefrom.

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton in view of Twersky as applied to claim 4 above, and further in view of Juhn (US Patent 4,641,663).

Claim 6 depends from amended claim 1. Because the Examiner's proposed combination of Sutton and Twersky fails to render amended claim 1 obvious, and because Juhn fails to cure the deficiencies noted with respect to amended claim 1, claim 6 is patentable over the applied art.

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Claims 7 and 12-19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Sutton in view of Twersky as applied to claim 1 and 11 above, and further in view of Shapira (US Patent 6,110,176).

Claims 7 and 12-19 depend from claim 1. Because the Examiner's proposed combination of Sutton and Twersky fail to render claim 1 obvious, and because Shapira fails to cure the deficiencies noted with respect to claim 1, claims 7 and 12-19 are patentable at least by virtue of their dependency.

Furthermore, Applicants submit that the Examiner's interpretation of Shapira is misplaced.

According to the Examiner, Shapira discloses a mixing chamber in the apparatus wherein an infusion fluid is mixed with extracted bone marrow. In reality, this irrigation fluid is directly injected in the bone, where it mixes with the bone-marrow (see col. 6, 1, 63-67). There is no mixing chamber in the apparatus where a fluid could be mixed with bone-marrow already collected from the extraction site. Obviously, the irrigation fluid of Shapira could not be replaced by anticoagulant, which can not be injected directly in a bone. Thus, the mixing with anticoagulant is provided by Shapira after extraction of bone-marrow, outside the apparatus. It would not be obvious to modify Sutton and Twersky with Shapira's device, and a combination of Shapira with Sutton and Twersky thus does not render these claims obvious.

Claims 20-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton in view of Twersky as applied to claim 1 above, and further in view of Morawski (US Publication 2004/0010236).

Claims 20-22 depend from claim 1. Because the Examiner's proposed combination of Sutton and Twersky fails to render claim 1 obvious, and because Morawski fails to cure the deficiencies noted with respect to claim 1, claims 20-22 are patentable over the applied art.

Claims 24-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton in view of Twersky as applied to claim 1 above, and further in view of Gauthier (US Patent 4,256,119).

Claim 25 depends from amended claim 1. Because the Examiner's proposed combination of Sutton and Twersky fails to render amended claim 1 obvious, and because Gauthier fails to cure the deficiencies noted with respect to amended claim 1, claim 25 is patentable over the applied art.

Claim 26 is amended to recite features similar to amended claim 1, and is patentable for reasons analogous thereto, as Gauthier fails to cure the deficiencies noted with respect to the Examiner's proposed combination of Sutton and Twersky.

## Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Dion R. Ferguson/

Dion R. Ferguson Registration No. 59,561

SUGHRUE MION, PLLC Telephone: (202) 293-7060

Facsimile: (202) 293-7860
WASHINGTON OFFICE

23373 CUSTOMER NUMBER

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